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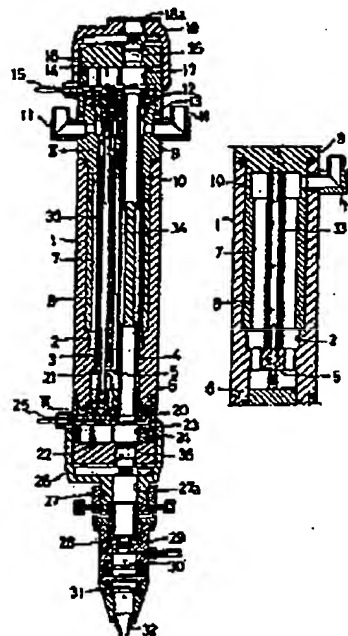
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APPLICANT : NIPPON WELDING KK;

INVENTOR : HOSODA TAKESHI;

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TITLE : PORTABLE SOLID-STATE LASER
OSCILLATOR



ABSTRACT : PURPOSE: To make it convenient to operate and to reduce the size and weight to a minimum by shaping an outer tube in a cylindrical form.

CONSTITUTION: A rod-shaped lamp 33 and a fixed laser rod 34 which are arranged in parallel with the axial line of an outer tube 1 are mounted on upper and lower holding tubes 9, 20. If the power supply for the rod-shaped lamp 33 is turned on and the lamp is lighted, the laser rod 34 oscillates a laser beam. After the laser beam has been reflected by both mirrors 35, 36 and has been amplified, the laser beam passes through a protruded tube 27 located at a lower cover tube 26, is converged by means of a lens holder 28 and is then discharged through a nozzle 32. If the laser beam is directed toward a required direction and is moved toward the required direction at a necessary speed while the outer tube 1 is suspended in an appropriate manner or is held by the arm of a robot, it is possible to achieve a desired machining process by means of the laser beam emitted from the nozzle 32.

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